

THE SKIES DURING APRIL

THE sun, the center of the solar system, has a mass 330,000 times as great as that of all the other bodies of the system put together. Owing to this great preponderance in size, its corresponding power of attraction holds in position and controls the motion of the planets, and keeps them all from leaving their orbits. To this, each planet, in the order of density, size and weight, is nicely balanced, and the equipoise is so true that their paths lie nearly on the same plane. The time required for making one revolution around the sun is so exact that the inferior planets, as a rule, have not been known to vary one-sixth part of a second within the past 2,500 years.

Were this attractive force suddenly increased or diminished a mere fraction, the whole system would become deranged and quickly lose its equilibrium. The planets would either fly off into limitless space, or approach so near to the sun that all animals and inanimate life would be speedily destroyed. It has been estimated that the sun affords 600,000 times as much light to the earth as the full moon, and exceeds in brightness at least three times that of the most powerful electric light. According to Professor Professor's estimates, in each second the sun

gives as much heat as would be given out by the burning of 1,000,000,000,000 tons of coal, and that which the earth alone receives every year would bring an ocean of ice water covering the globe 50 feet deep to the boiling point, could the same be applied to it continuously.

The rotation of the earth on its axis causes an interruption of solar heat on an average of twelve hours out of every twenty-four. This accounts for the earth's maintenance of that equable temperature on its land and sea surfaces that proves so conducive to the propagation of every species of life. Without the sun, the earth would be without the sun's heat, for it is by that alone that the waters are kept in liquid form. The sun, by all our most comprehensive standards, is impossible to estimate the amount of heat expended by the sun upon the solar system, much less are we able to solve the problem as to its resources

for maintaining so vast and constant a supply of heat. In the lapse of human history not the least diminution has been detected in its store.

The computation has been made by a certain astronomer, that were the entire body of the sun as we see it a mass of solid coal at the present rate of expenditure it would burn out entirely in about 5,000 years. No matter what the direct source of the sun's heat, the conclusion draws upon the mind that if natural laws alone operate in its production this heat at some remote time will perceptibly diminish and at last be exhausted.

Long before this could occur, however, all life upon the earth and elsewhere within the solar system would have perished, and every trace of mankind obliterated from the globe.

Conjectures like these need not occasion the least alarm, for even the wildest speculation places these events in the very remote future—not to say millions of years hence.

The Planets.

Mercury, Venus, Mars and Jupiter are our evening stars in April. Mercury, Venus and Jupiter being in the western sky in the early evening, while Mars appears at the eastern horizon. The swift winged Mercury, so seldom seen by earth gazers, appears to our eyes in liquid form. The sun, at his greatest distance east of the sun on the 4th, and for a few days before and after this date he sets about an hour and a half after the sun. Those who look faithfully for him, a few days

north of the sunset point, should be able to detect him in the evening twilight.

Venus and Jupiter continue the leading members, in point of brilliancy, both being seen in the western sky soon after sunset. Venus has been moving eastward from Jupiter since their conjunction in March, but on April 5 she is "stationary," and in a few days commences to move toward the sun. She therefore passes Jupiter on her backward path, and on April 17 we see the two planets again in conjunction. They are now about 8 degrees apart, and set about 7:30 p. m. Venus now rapidly moves toward the sun until on the 27th of the month she is in inferior conjunction with that body, and passes from evening star to morning star.

Mars had become a much more conspicuous feature this month, rising on the 15th about 9 o'clock in the evening, and daily growing more brilliant. On April 2 he appears stationary in his position in his orbit, afterward commencing to retrograde in common with all the superior planets, previous to their opposition to the sun. Mars is then situated in degrees west of the bright star Antares, in the Scorpion; a star which he very much resembles, whenever he is in the heavens. On the 20th, Mars and the moon are in conjunction, 3½ degrees apart, and rise about 8:30 p. m. Saturn has come out of the sun's rays sufficiently to be seen as our morning star. On April 20 he rises about 3 o'clock and may easily be detected in the southeastern horizon, shining with a dull yellowish light. While not yet a very brilliant member,

he is each day increasing both in splendor and magnitude.

The Constellations.

In one or two previous articles we have spoken at some length of a number of the various constellations of the heavens, but have not said as much about the circumpolar constellations as they probably deserve. By circumpolar constellations we mean those constellations which are situated in a circle around the north star and never set.

We first take up Ursa Major, the Great Bear. Looking skyward about 9 o'clock in the evenings of April, we behold this great constellation high up in the heavens. It is easily distinguished by means of a cluster of seven bright stars, forming what is called The Dipper. In some countries it is called "Charles's Wain or Waggon."

The Dipper, which is now near the meridian, above the north star, lies with its bottom towards us and its handle to the right. Climbing up behind the Great Bear to Draco, the Dragon, which, with its many contortions, occupies a large space in the polar regions. North of Draco is situated Ursa Minor, the Little Bear. This constellation which contains but few prominent stars, is, however, much distinguished because of the advantages which its position in the heavens affords to surveying and navigation. Its principal is so near the true pole of the heavens that it has been known for several thousand years as the North Polar star. The seven principal stars

in this constellation form a figure very much like The Dipper in the Great Bear; but the Dipper in this constellation is reversed and only about one-half as large as the Dipper in the Great Bear. Below the North Star we see Cepheus and Cassiopeia. "Cepheus contains no star above the third magnitude. Cassiopeia is nearly at the same distance from the North Star as the Great Bear and is easily distinguished by five stars of the second and third magnitudes in the form of the letter "W." This constellation is otherwise memorable as having once contained a very bright star which subsequently disappeared. It may not be amiss to make a remark or two here upon its extraordinary appearance. About three hundred years ago this star all at once shown out with great splendor. It was brighter than any planet and could be seen at noonday. Its light, which was at first of a dazzling whiteness, turned into a reddish yellow and then into an ashy paleness, in which light it expired after being visible for about sixteen months.

The Constellations Not Circumpolar.

Of the other prominent stars and constellations visible last month, Castor, Pollux, Procyon and Sirius, which were then just a little past the meridian, when viewed now at about half past eight o'clock in the evenings, are seen about half way between the meridian and the western horizon; while Orion and Taurus are on the point of setting. Regulus in the Lion, which has been gradually getting higher and higher in the heavens, has now reached the me-

ridian. Due east of Regulus and a little more than half way between this star and the horizon, we see a very bright star, which cannot fail to draw the attention of the star gazer; this is Arcturus in Bootes which shines with a reddish light very much like that of Mars. Bootes, otherwise known as the Bear Driver, early excited the admiration of the ancients and many were the verses composed in his honor. Claudian says that "Bootes" with his wain the north unfolds; The Southern gate Orion holds." W. A. GATHRIGHT, Danbury, Va.

A Street Scene.

(Louisville Courier-Journal.) The teamster was not beating his horses, but he was using pretty vigorous language. "This cruelty to animals," declared the woman with three birds on her hat, "is positively dreadful." "Oh, it's perfectly outrageous," agreed the woman in the Persian lamb coat.

Change of Pigments.

(Louisville Courier-Journal.) Returned Traveler—I haven't seen a newspaper for a month. How'd the cat of that impeached judge turn out? Last I heard of him they were painting him in the darkest colors. Stayed in town, I tell you, he's been white-washed since then.

Now For a Week of Sensational Selling!

HOSIERY SALE. GREATEST OFFER YET

Ladies' Silk Finish Black Hose, 10c. Regularly the spliced heel and toe silk finished hosiery for ladies, special as above.

Ladies' and Misses' best 16½c Hose, 12½c.

Ribbed hose for misses and children, and fine finish double sole hose for ladies, at above price.

Elastic Ribbed Top Hose, best 20c Grade, 15c.

Come in all sizes for ladies, best black, high spliced heel and double sole.

Men's Half Hose, 10c.

Past black double heels and toes, regular special, 2 for 3 quarter grade.

Children's Triple Knee Hose, 20c. Extra heavy ribbed hose for boys and girls, with extra spliced heel and triple knee, regular 3c grade.

A SENSATION. \$25 to \$40

SUITS \$10

ALMOST GIVEN AWAY. Choice of fifteen suits, all high grade, carried over from fall of 1904. They are only a few months old, but must be cleared out at terrific loss. Garments of the highest character, but in order to sell these fifteen fine cloth and velvet suits we will name this most remarkable reduction. These can be used as separate skirts or jackets if desired. Do not miss the opportunity tomorrow and week.

Dress Goods Specials.

36 Inch Panama Suitings.

Most popular fabric of the season and exceptionally good quality, in a full range of colors, sold elsewhere at \$6 per yard, here, Monday and week, only 29c.

Wool Challies.

Entire line of 36 and 42 inch wool challies, in plain figure, pattern or satin stripes, effects, all new, desirable light, dark and medium colorings, for Monday and week, per yard, 35c.

New Wool Suitings.

The most remarkable values and the greatest collection ever offered anywhere, granites, albatross and panama voles, including all the desirable colors, black, cream, etc., bought to sell at 6c per yard, Monday and week, per yard, 45c.

New Voiles, Panamas and Mohairs.

Two big lines of all wool Panamas and fine lustrous mohairs, regular 75c grades, slightly broken up in the lot assortment, but still containing most of the desirable colors, also a full line of colored 42-inch voiles for summer wear, also a 5c grade, Monday and week, per yard, 49c.

Plain and Fancy Mohairs.

Fine checked and plain mohairs, 36 inches to 42 inches in width, strictly high-class materials, highly popular this spring for separate skirts and shirt waists, sold elsewhere at never below 50c. Monday and week, per yard, 59c.

All Wool Black Panamas.

42-inch fine all wool Panama suitings, in black only, a grand separate skirt fabric, cannot be duplicated elsewhere under \$1.25. Exceptionally remarkable value, here, Monday and week, at, per yard, 89c.

Compare Prices. Here Are Bargains To Make Everybody Buy.

CHILDREN'S MUSLIN UNDERWEAR, 10c; 3 CAKES OF BUTTERMILK SOAP, 5c; 50c ORIENTAL LACES, 20c; 25c, 35c and 50c COLLARS, 10c; \$2.50 EMBROIDERED WAIST PATTERNS, \$1.50; \$11.50 COVERT COATS, \$6.50; \$1.25 SHIRT WAISTS, 85c; LADIES' \$25 to \$40 SUITS FOR \$10; 50c FOULARD SILK, 35c; \$1.00 FANCY SILKS, 63c; 40c PANAMA CLOTH, 29c, AND HUNDREDS OF OTHER ITEMS EQUALLY AS CHEAP. READ ON.

RECORD BREAKING COLLAR SALE!

Newest Turnover and Stock Collars, 25c, 35c and 50c values.

Here's a remarkable offer. Bought over 2,500 collars in closing out an importer's entire line. The lots consist of embroidered collars, fancy Swiss turnovers, lace and embroidery and batiste stock collars, etc., all 25c, 35c and 50c collars.

10c

Toilet Articles.

Elderflower Soap, 3c

Buttermilk Soap, per box of 2 cakes, 5c

Lyon's Tooth Power, 10c

Rubifoon, 10c

5c Cuticle Soap, 5c

5c Bay Rum, Florida Water and Violet monia, 10c

10c



Notion Specials.

Ironing wax, 1c

5c Safety Pins, all sizes, 2c

5c Boxed Hair Pins, 2c

5c Kid Curly Pins, 2c

5c Curving Irons, 5c

12c Pin Cushions, 7c

15c Horn Dressing Combs, 10c

25c Nickel-plated Shears, 10c

GREAT LACE SALE!

25c and 50c Oriental laces from 5 to 10 inches wide, with the insertions to match, come in white, butter and ecru, extra special price of 15c and 20c.

25c new Val laces, by the dozen only, per dozen, 20c

50c new Val laces, by the dozen only, per dozen, 30c

\$1.00 new Val laces, by the dozen only, per dozen, 50c

SOLE AGENTS FOR THE CELEBRATED LADIES' HOME JOURNAL PATTERNS, 10c and 15c

SPECIAL SALE OF CHILDREN'S Muslin Underwear. A GREAT BOON TO MOTHERS.

ALL SALT LAKE WILL BE TALKING ABOUT THIS GREAT SALE OF CHILDREN'S UNDERWEAR AT THESE UNHEARD OF PRICES. ALL MADE IN A SANITARY FACTORY BY CLEAN AMERICAN GIRLS. SEAMS FELLEED AND SOME DOUBLE STITCHED. ALL GOOD MUSLIN AND WELL MADE. BEST AND GRANDEST VALUES EVER OFFERED. THE SIZES OF THESE GARMENTS RUN FROM 1 TO 14 YEARS OF AGE. ALL WORTH DOUBLE.

LOT No. 1.

Children's Drawers, Waists and Skirts.

Children's and misses' drawers, made of good muslin, 5 fine tucks, hem-stitched hem.

Children's waists, of white cotton, taped and plenty of buttons.

Children's skirt and waist combined, good muslin, hem-stitched hem.

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LOT No. 2.

Children's Skirts, Waists and Drawers.

Children's drawers, good muslin, hem-stitched hem and ruffle.

Children's skirts, trimmed with fine tucks, lace edge.

Children's skirt and waist combined, good muslin, hem-stitched hem.

Children's waists of white cotton, well stayed, with taped buttons.

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LOT No. 3.

Children's Drawers and Skirts.

Children's drawers of fine white muslin, trimmed with fine tucks and embroidery ruffle.

Children's skirts of white muslin, umbrella shape, trimmed with fine tucks, hem-stitched ruffle.

Children's skirt and waist combined, good muslin, hem-stitched hem.

Children's waists of white cotton, well stayed, with taped buttons.

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